

Notice of Allowability

Application No.

09/933,725

Examiner

Michael I Poe

Applicant(s)

EVERETT, STEVE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on January 29, 2004.
2. ☒ The allowed claim(s) is/are 1-12 (renumbered 5, 1, 6-11, 2-4 and 12, respectively).
3. ☒ The drawings filed on 22 August 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 20040225.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

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EXAMINER'S AMENDMENT

Authorization

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with applicant Steve Everett on February 26, 2004.

Amendments

2. The application has been amended as follows:

The abstract has been replaced by the abstract presented on the attached separate page.

The specification has been amended as follows:

page 6, 3rd paragraph, line 2 "Pat." would be deleted after "U.S.", -- Patent -- would be inserted after "U.S.", ";," would be deleted after "4,670,671", and - and -- would be inserted after "4,670,671"; and

page 7, 5th paragraph, line 5 -- . -- would be inserted after "course".

Claim 1 has been replaced by the following:

1. (Currently Amended) An apparatus for efficient forming of building blocks that are uniform in size and shape from freshly dug soil comprising:
a casing having [six] a plurality of sides, said casing comprising at least [two apertures] one first aperture in an upper surface of said casing for the introduction [and ejection] of a quantity of soil, at least one second aperture in a lower surface of said casing for the ejection of said building blocks, and an enclosed cavity of adjustable dimensions defined by said plurality of sides, wherein two opposing sides of said casing are adjustable within the remaining [four] sides of said casing for adjusting said dimensions of said cavity, said two opposing sides of said casing [being capable of] traveling within the entirety of said casing and [of] creating sufficient pressure against one another for the compression of said quantity of soil;

[mechanical] means for compressing said quantity of soil within said casing to specific pressures between said two opposing sides to form said building blocks;

[mechanical] means for moving said two opposed sides within said casing between areas of introduction, compression and ejection within said casing;

[mechanical] means for ejecting said [quantity of soil] building blocks from the bottom of said casing through said at least one second aperture by moving said two opposing sides apart such that said building block falls downwardly by [use of] gravity after compression; and

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a programmable controller that controls said size and design of said building blocks by controlling said [mechanical] introduction, means for compressing, means for moving and means for ejecting whereby consistent compression is imposed on said quantity of soil.

Claim 2 has been replaced by the following:

2. (Currently Amended) A method for the efficient forming of building blocks that are uniform in size and design from freshly dug soil by a self-enclosed linear process of receiving, moving, and compressing [and ejecting] a quantity of soil to form said building blocks and ejecting said building blocks comprising:
controlling said size and design of said building blocks formed by said self-enclosed linear process using a programmable controller and operable mechanical means;
introducing said quantity of soil into a casing through a first aperture in an upper surface of said casing [using a vibratory device], wherein said casing comprises [six] a plurality of sides and an enclosed cavity of adjustable dimensions, said cavity having two opposing faces formed from two opposing sides of said casing, wherein said two opposing sides are adjustable within the remaining [four] sides of said casing for adjusting said dimensions of said cavity;
displacing said quantity of soil through said cavity in said casing to an area of compression within said casing by moving said two opposing sides;
compressing said quantity of soil within said casing between said two opposing sides by reducing said dimensions of said cavity to form said building blocks;
displacing said building blocks [quantity of soil] after compression to an ejection area within said casing by moving said two opposing sides; and
ejecting said building blocks [quantity of soil] from the bottom of said casing through a second aperture in a lower surface of said casing by allowing said building blocks to fall downwardly through gravity by increasing said dimensions of said cavity.

Claim 4 has been replaced by the following:

4. (Currently Amended) Apparatus of claim 1, wherein the apparatus comprises a casing having six sides [or more, in] through which two opposing faces of said two opposing sides travel within said casing for the purpose of receiving, displacing, and compressing said quantity of soil and ejecting [a quantity of soil] said building blocks.

Claim 5 has been replaced by the following:

5. (Currently Amended) Apparatus of claim 1, wherein the apparatus comprises a casing cylindrical in nature through which two opposing faces of said two opposing sides travel within said casing for the purpose of receiving, displacing, and compressing said quantity of soil and ejecting [a quantity of soil] said building blocks.

Claim 7 has been replaced by the following:

7. (Currently Amended) Apparatus of claim 1, wherein a plurality of said [cases may be] casings are fastened to one another with the purpose of creating a higher volume of compressed [soil] building blocks simultaneously that are uniform in size and design.

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Claim 8 has been replaced by the following:

8. (Currently Amended) Apparatus of claim 1, wherein [cases] a plurality of said casings of varying dimensions may be fastened to one another with the purpose of creating compressed [soil] building blocks simultaneously that are varied in size and design.

Claim 9 has been replaced by the following:

9. (Currently Amended) Method of claim 2, wherein [the] said opposing faces of said cavity are [moveable] moved by [an] said operable mechanical means.

Claim 10 has been replaced by the following:

10. (Currently Amended) Method of claim 2, wherein said opposing faces of said cavity are controlled by an operable command means of said programmable controller, which [is effective, when operated, to] commands [the] said opposing faces [between stages of operation] during said introducing, displacing, compressing and ejecting steps.

Claim 11 has been replaced by the following:

11. (Currently Amended) Method of claim 2, wherein said quantity of soil is introduced into said casing by a vibration means.

Claim 12 has been replaced by the following:

12. (Currently Amended) An apparatus for the efficient forming of building blocks that are uniform in size and design from freshly dug soil by a self-enclosed linear process of receiving, moving, and compressing a quantity of soil to form said building blocks and ejecting [a quantity of soil] said building blocks comprising:

means for controlling said size and design of said building blocks formed by said self-enclosed linear process using a programmable controller and operable mechanical means;

means for introducing said quantity of soil into a casing through a first aperture in an upper surface of said casing [using a vibratory device], wherein said casing comprises [six] a plurality of sides and an enclosed cavity of adjustable dimensions, said cavity having two opposing faces formed from two opposing sides of said casing, wherein said two opposing sides are adjustable within the remaining [four] sides of said casing for adjusting said dimensions of said cavity;

means for displacing said quantity of soil through said cavity in said casing to an area of compression within said casing by moving said two opposing sides;

means for compressing said quantity of soil within said casing between said two opposing sides by reducing said dimensions of said cavity to form said building blocks;

means for displacing said [quantity of soil] building blocks after compression to an ejection area within said casing by moving said two opposing sides; and

means for ejecting said [quantity of soil] building blocks from the bottom of said casing through a second aperture in a lower surface of said casing by allowing said building blocks to fall downwardly through gravity by increasing said dimensions of said cavity.

Examiner's Statement(s) of Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

- (1) With regard to claims 2 and 9-12, the prior art of record does not teach or suggest the claimed method and apparatus for the efficient forming of building blocks from freshly dug soil by a self-enclosed linear process of receiving, moving and compressing a quantity of soil and ejecting the building blocks, as a whole, especially including introducing the quantity of soil into a casing comprising an enclosed cavity of adjustable dimensions; displacing the quantity of soil through the cavity between areas of compression and ejection by moving two opposing sides of the casing; ejecting the building blocks, formed by compression between the two opposing sides, from the bottom of the casing through an aperture in a lower surface of the casing by allowing the building blocks to fall downwardly through gravity by increasing the dimensions of the cavity; and means therefor. Note that, although similar methods and apparatus for forming adobe blocks from freshly dug soil are taught in the prior art of record [see for example U.S. Patent No. 3,070,003 (Stacy), U.S. Patent No. 4,164,537 (Drosthalm et al.), U.S. Patent No. 4,579,706 (Elkins), and U.S. Patent No. 4,640,671 (Wright)] and it is known in art as shown by the prior art of record to eject molded articles and allow them to fall downwardly under the influence of gravity [see for example U.S. Patent No. 3,736,085 (Mitchell) and U.S. Patent No. 4,719,070 (Strobel et al.)], none of the prior art of record teaches or suggests a method or an apparatus capable of the claimed ejection mechanism.
- (2) With regard to claims 1 and 3-8, the prior art of record does not teach or suggest the claimed apparatus for efficient forming of building blocks from freshly dug soil, as a whole, especially including a casing comprising at least one first aperture in an upper surface of the casing for the introduction of a quantity of soil, at least one second aperture in a lower surface of the casing for ejection of the building blocks and an enclosed cavity of adjustable dimensions and means for ejecting the building blocks from the bottom of the casing through the at least one second aperture by moving two opposing sides of the casing apart such that the building block falls downwardly by

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gravity after compression of the quantity of soil between the opposing sides of the casing. Note that, although similar apparatus for forming adobe blocks from freshly dug soil are taught in the prior art of record [see for example U.S. Patent No. 3,070,003 (Stacy), U.S. Patent No. 4,164,537 (Drostholm et al.), U.S. Patent No. 4,579,706 (Elkins), and U.S. Patent No. 4,640,671 (Wright)] and it is known in art as shown by the prior art of record to eject molded articles and allow them to fall downwardly under the influence of gravity [see for example U.S. Patent No. 3,736,085 (Mitchell) and U.S. Patent No. 4,719,070 (Strobel et al.)], none of the prior art of record teaches or suggests an apparatus capable of the claimed ejection mechanism.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael I Poe whose telephone number is (571) 272-1207. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Michael Poe/mip


MICHAEL COLAIANNI
PRIMARY EXAMINER

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ABSTRACT OF THE DISCLOSURE

A portable single station method and apparatus for compressing a quantity of freshly dug soil into building blocks by an enclosed system which provides a linear process for receiving and compressing the quantity of soil and for ejecting the formed, compressed building blocks. The system includes a stationary chamber equipped with an internal adjustable cavity in which the desired block is formed and a pair of opposing pressure heads capable of moving toward and away from each other in unison or independently to receive, compress, and eject the building blocks.